

AbstractCommunication Method and Apparatus

5           A set of formats and protocols is proposed for a satellite communications system. In these formats, a pilot signal (PS) is inserted after every 25 or 29 data symbols. The formats consist of SCPC frames (F) which may contain either data (D) and in-band signalling information (SU), or only signalling information (SU). In either case, the contents of each frame (F) are error-correction coded before transmission with the same coding rate. Each data frame (F) carries the data content of an integral number of input user data frames (M), each of which comprises four subframes. Different symbol transmission rates are used for different input data rates, the symbol transmission rates being selected so that their different synchronising clock rates can easily be obtained from a common clock. Data bursts may be preceded by a constant power level preamble (P).

15           The formats and protocols satisfy the requirements of a high data rate satellite communications system.

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[Figures 5, 6a to 6d]